DOCKET NO. 5244-0099-2X

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :

TETSURO MOTOYAMA ET AL. : EXAMINER: NGUYEN, N.

SERIAL NO: 09/393,677 :

FILED: SEPTEMBER 10, 1999 : GROUP ART UNIT: 2179

FOR: REMOTE SYSTEM USAGE :
MONITORING WITH FLEXIBLE
OBJECT

APPEAL BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicants appeal the rejection in the Office Action of March 25, 2005.

I. REAL PARTY IN INTEREST

The present application is assigned to Ricoh Company, Ltd., having a place of

business at 3-6 Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan, and that

party is the real party in interest in the present appeal.

II. RELATED APPEALS AND INTERFERENCES

Appellant, appellants' legal representatives, and the assignee note the present

Appeal is related to the Appeal in co-pending U.S. application serial No. 09/440,692,

by virtue of that Appeal and the present Appeal having similar issues and similar

rejections over the same applied art.

III. <u>STATUS OF CLAIMS</u>

Claims 1, 3-9, 11-17, 19-25, and 27-32 are pending in this application, and each of claims 1, 3-9, 11-17, 19-25, and 27-32 is on appeal. Claims 2, 10, 18, and 26 were canceled during prosecution.

IV. <u>STATUS OF AMENDMENTS</u>

Filed concurrently with the present Appeal Brief is a Response to the Office Action of March 25, 2005, submitting a Terminal Disclaimer over U.S. application serial No. 09/440,692 to obviate the outstanding double patenting rejection in the Office Action. No amendments were submitted in that Response.

V. <u>SUMMARY OF THE INVENTION</u>

The claimed invention is directed to a system, a method, and a computer program product that all operate to monitor usage of an interface of a device, the interface including a plurality of operations to be selected by a user, and that then send a log of monitored usage data to a destination.

More particularly, in the claimed invention, and with reference to Figures 9-11 in the present specification as a non-limiting example, a device 300 includes a user interface 510. Figures 10 and 11 show specific embodiments of user interfaces 600, 700, the embodiment of Figure 10 showing a monitor 600 of a workstation as a user interface and the embodiment of Figure 11 showing an operation panel 700 of an image forming device as a user interface. (See also the present specification at page 17, line 25, to page 19, line 2).

Further, in the claimed invention a monitoring is executed to monitor data of selecting of the plurality of operations of the interface by the user, and to generate a log of the monitored data in the device. (See for example the monitoring block 1200 in Figures 12A, 12B, which includes a logging operation 1315, and the corresponding discussion in the present specification at page 19, line 26 et. seq.). The log of the monitored data is in the form of an abstract class. (See for example the specification at page 29, line 9 et. seq.).

Further, a communicating device receives an object derived from the abstract class including the log of the monitored data. (See for example the sending block 1600 in Figures 12A, 12B and also Figure 17 in the present specification).

Further, the monitoring device automatically starts the monitoring without requiring a connection to a receiving device to which the log of monitored data is to be sent. (See for example the present specification at page 20, line 21 et. seq., and particularly page 20, lines 22-23 that state that Figure 13 shows that when a target application of a device starts up a startMonitoring function is called. As evident from that discussion in the present specification and from Figure 13 no connection to a receiving device to which the log of the monitored data is to be sent is needed to begin the monitoring operation).

Further, the communicating device automatically communicates the log of the monitored data by a unidirectional communication without requiring input from the device to which the message of the monitored data is to be sent. (That subject matter is evident from Figure 17 in the present specification showing the operation of the sending block 1600 and the corresponding description thereof in the present specification at page 26, line 24 et. seq. At that portion it is clear that the message of

the log of the monitored data is sent without requiring an input from the device to

which the log of the monitored data is to be sent).

VI. ISSUES

The first issue outstanding in the present application is whether claims 25 and

27-32 set forth statutory subject matter under 35 U.S.C. § 101.

The second issue outstanding in the present application is whether each feature

recited in claims 1, 3-9, 11-17, 19-25, and 27-32 is fully met by the combination of

teachings in U.S. patent 6,003,070 to Frantz in view of U.S. patent 6,163,802 to Lin et

al. (herein "Lin") under 35 U.S.C. § 103(a).

VII. ARGUMENT

Rejection Under 35 U.S.C. § 101

The first issue in the present application is whether claims 25 and 27-32 set

forth statutory subject matter under 35 U.S.C. § 101.

The rejection to claims 25 and 27-32 as reciting non-statutory subject matter

states:

> The claims recite "a computer program product", which
> is defined in the specification on page 36 as being "any
> type of media suitable for storing electronic
> instructions", which could include intangible media
> such as signals, carrier waves, transmissions, optical
> waves, transmission media or other media incapable of
> being touched or perceived absent the tangible medium
> through which they are conveyed.

The above-noted rejection is traversed as claims 25 and 27-32 clearly set forth a tangible media.

First, the outstanding rejection has only apparently looked at the preamble of the noted claims and has not looked at the body of the noted claims. The first element in claim 25 is "a *computer storage medium* and a computer program code mechanism embedded in the computer storage medium..." (emphasis added). Clearly such a medium is a tangible medium capable of being touched.

Also, the basis for the rejection citing the specification at page 36 is not at all understood. First, the noted portion in the specification indicates a "media suitable for *storing* electronic instructions" (emphasis added). Such a *storing media* is clearly tangible.

Further, the statement in the Office Action that "such media could include intangible media such as signals, carrier waves, transmissions, optical waves, transmission media or other media incapable of being touched..." is unclear as such media clearly cannot *store* electronic instructions.

In such ways, claims 25 and 27-32 clearly recite statutory subject matter and are in full compliance with all requirements under 35 U.S.C. § 101.

Rejection Under 35 U.S.C. § 103(a) over Frantz in view of Lin

Independent Claims 1, 9, 17, 25

The above-noted claims positively recite several features neither taught nor suggested by Frantz in view of Lin.

Each of independent claims 1, 9, 17, and 25, and thereby the claims dependent therefrom, requires "a device comprising an interface, the interface comprising a plurality of operations to be selected by a user".

Each of independent claims 1, 9, 17, and 25, and thereby the claims dependent therefrom, also requires either a monitoring device or a monitoring operation to "automatically start the monitoring without requiring a connection to a receiving device to which the log of monitored data is to be sent".

Each of independent claims 1, 9, 17, and 25, and thereby the claims dependent therefrom, also requires either a communication device or a communication operation to "automatically communicate the log of the monitored data by a unidirectional communication without requiring input from the device to which the log of the monitored data is to be sent"

Such features positively recited in the claims set forth an operation and structure that clearly differs from the teachings in Frantz in view of Lin.

The claims as currently written are directed to a system, method, or computer program product that includes a device comprising an interface with a plurality of options to be selected by a user. The user's selection of those pluralities of options is monitored, generated into a log, and stored, without an input from or connection to a device that ultimately will receive the log. A communicating device receives an object derived from the abstract class including the log of the monitored data, and communicates that message of the monitored data by a unidirectional communication without requiring input from a device to which the message of the log of the monitored data is to be sent. That is, in the claimed invention the destination device to which the log of the monitored data is to be sent does not need to establish a prior connection to the communicating device, nor does that destination device need to provide any instructions for authorization of the monitoring, generating, storing, or communicating operations.

Such features positively recited in the claims set forth an operation and structure that clearly differ from the teachings in Frantz in view of Lin.

Frantz, the primary cited reference in the new rejection, is not even similar to the claimed features. The outstanding rejection appears to cite the teachings in Frantz as Frantz utilizes an element with the same term "interface" as in the claimed features. However, the interface and the monitoring operation performed in Frantz differ completely from the claimed features.

As shown in Figure 1 Frantz discloses an interface device 10 that is placed between equipment 20, an ASCII terminal 18, and a line printer 19. That interface 10 in Frantz is a hardware interface and is in particular a smart internet interface for telephone switching equipment status reporting and control.[1] Frantz discloses that standard telephone switching equipment such as a private branch exchange (PBX) or an automatic call distributor (ACD) typically are equipped with two standard interfaces, one standard line printer interface, which can log error conditions and changes in status in configuration, and a second standard interface on most equipment is an ASCII dumb terminal interface to drive a VT 100 style dumb terminal that a technician can use to query an error buffer and also to make changes in the configuration of the system to take on line or off line certain functionalities in the switch.[2] Frantz recognizes that a problem with such standard equipment is that all the checking and testing must be done locally.[3]

However, Frantz differs fundamentally from the claimed features.

The claims are directed to a device in which an interface includes "a plurality of operations to be selected by a user". A non-limiting example of such an interface

---

[1] Frantz at column 1, lines 5-7.
[2] Frantz at column 1, lines 9-20.
[3] Frantz column 1, lines 21-22.

may be an operation panel of an image forming device including several operations

that can be selected by a user, operations such as "Print", "Copy", etc.

The interface 10 shown in Figure 1 in <u>Frantz</u> is not directed to such a type of

interface. More particularly, that interface 10 does not have any operations selected

by a user that are monitored.

In the claimed invention the user's selecting of the plurality of operations on

the interface is monitored, e.g. it is monitored if a user presses a "Print" button on an

interface of an image forming device interface in such a non-limiting example, and

that monitored data of the user's selection of the operations on the interface is

communicated.

The outstanding rejection does appear to make a reference to "activation

criteria" in <u>Frantz</u> as corresponding to such operations that are monitored.[4] However,

in that respect <u>Frantz</u> merely appears to indicate that activation criteria can indicate

when information is to be communicated, and the "activation criteria" are not in fact

user's selection of operations on the interface. More particularly, <u>Frantz</u> notes that

> ...the activation criteria can be set to an alert mode,
> wherein only emergency system messages, such as
> critical error messages would be sent. The activation
> criteria can be set to a maintenance/repair mode where
> every system message, including interrupts, register
> contents, memory mapping, memory contents, software
> descriptions, configuration settings, error log contents,
> and any other data useful information about the status of
> the equipment that would be used by a technician in
> repairing, updating, monitoring, or performing routine
> maintenance on the equipment is sent via E-mail.[5]

The claims clearly require different operations as in <u>Frantz</u>. In the claimed

invention the user's actual selections of operations on the interface are monitored.

---

[4] Office Action of March 25, 2005, page 4, lines 6-7 of prenumbered paragraph 9.
[5] <u>Frantz</u> at column 5, lines 3-13.

8

That is simply not the case in Frantz. Frantz does not disclose any even similar operation.

Thereby, Frantz does not disclose or suggest the claimed "interface" and "monitoring" device positively recited in the claims.

Moreover, no teachings in Lin are cited with respect to the above-noted feature or can overcome the above-noted deficiencies in Frantz.

Thereby, each of the pending claims distinguishes over Frantz in view of Lin and the outstanding rejection based on Frantz in view of Lin must be reversed.

The Dependent Claims

Moreover, the dependent claims recite further features neither taught nor suggested by Frantz in view of Lin in contrast to the positions stated in the March 25, 2005 Office Action.

Dependent Claims 3, 4, 11, 12, 19, 20, 27, 28

Dependent claims 3, 11, 19, and 27 further recite that the "target application is an image forming device and the interface is an operation panel of the image forming device". Dependent claims 4, 12, 20, and 28 further recite that "the device is an appliance and the interface is an operation panel of the apparatus". No combination of teachings of Frantz in view of Lin addresses the above-noted features.

The rejection to the above-noted claims relies upon Frantz to disclose the interface as an operation panel of an image forming device, and Frantz to also disclose the apparatus as directed to an operation panel of an appliance.[6]

---

[6] Office Action of March 15, 2005, page 5, lines 13-16.

9

In that respect applicants submit that reliance on the teaching of <u>Frantz</u> at column 2, lines 15-31 is misguided. At column 2, lines 5-31 <u>Frantz</u> provides examples of interface devices that also perform monitoring operations of the devices themselves. For example, <u>Frantz</u> discloses a photocopier that monitors the amount of toner and paper. In no respect does <u>Frantz</u> teach or suggest that the interface device monitors actual selections on the interface device by a user. In <u>Frantz</u> the noted photocopier only monitors the amount of toner and paper but does not at all monitor the user's selections of the graphical user interface of the photocopier, as an example. Thus, the reliance on the teachings in <u>Frantz</u> at column 2, lines 15-31 is misguided with respect to the claimed features set forth in the above-noted claims.

Thereby, dependent claims 3, 4, 11, 12, 19, 20, 27, and 28 further distinguish over the applied art.

Dependent Claims 5, 13, 21, 29

Dependent claims 5, 13, 21, and 29 further recite "the communicating device sends the log of the monitored data when the user exits the target application". That feature also distinguishes over <u>Frantz</u> in view of <u>Lin</u>.

The above-noted features is believed to clearly distinguish over <u>Frantz</u>, which is relied upon to teach that feature at column 4, lines 32-52.[7]

The Office Action cites <u>Frantz</u> at column 4, lines 32-52 to disclose sending the log of the monitored data when the user exits the device. That basis for the outstanding rejection is not understood as <u>Frantz</u> does not disclose or suggest any such features. As noted above, the claims are directed to a system that monitors how a user selects operations on an interface, and thus when the user exits the interface the

---

[7] Office Action of March 15, 2005, page 8, last two lines.

10

log of the monitored data is communicated. <u>Frantz</u> is not directed to a device that

monitors how a user selects operations on an interface, and thus <u>Frantz</u> cannot teach

or suggest sending such log data when the user exits the device. In <u>Frantz</u> the user is

not exiting the device at all.

Thereby, dependent claims 5, 13, 21, and 29 further define over the applied art.

Dependent Claims 6, 14, 22, 30

Dependent claims 6, 14, 22, and 30 further recite "a setting unit configured to

set a number of sessions of the target application to be executed by the user prior to

the communicating device communicating the log file of the monitored data".

With respect to the above-noted feature the Office Action cites item 25 in

<u>Frantz</u> and the disclosure at column 4, line 56 to column 5, line 12.[8] However, that

reliance on the teachings in <u>Frantz</u> is not at all understood. <u>Frantz</u> does not disclose or

suggest any indication in which a number of sessions can be set of the target

application being used by the user prior to communicating the device. None of the

noted "activation criteria" in <u>Frantz</u> is directed to such a feature. Thus, the above-

noted claims even further distinguish over the applied art.

Thereby, dependent claims 6, 14, 22, and 30 further distinguish over the

applied art.

Dependent Claims 7, 15, 23, 31

Dependent claims 7, 15, 23, and 31 further recite the "abstract class includes

first and second derived classes, the first derived class storing data of one session and

the second derived class storing data of the set number of sessions".

---

[8] Office Action of March 15, 2005, page 6, first paragraph.

To meet the above-noted limitations the outstanding rejection cites <u>Lin</u> at column 7, line 45 to column 8, line 25.[9] However, at that portion <u>Lin</u> does not meet the above-noted features. That is, <u>Lin</u> does not teach or suggest a first derived class storing data of one session and a second derived class storing data of a set number of sessions. The basis for the outstanding rejection has not even addressed such a feature in any detail and does not provide any indication of how <u>Lin</u> teaches such features.

Thereby, dependent claims 7, 15, 23, and 31 further distinguish over the applied art.

IX. CONCLUSION

For the foregoing reasons each of claims 1, 3-9, 11-17, 19-25, and 27-32 recites statutory subject matter and distinguishes over the teachings in <u>Frantz</u> in view of <u>Lin</u>, and thereby the outstanding rejections must be REVERSED.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/03)
JJK:SNS:smi

_____
James J. Kulbaski
Registration No. 34,648
Surinder Sachar
Registration No. 34,423
Attorneys of Record

I:\ATTY\SNS\5244\52440099\52440099-AB 5-10-05.DOC

---

[9] Office Action of March 25, 2005, page 6, second paragraph.

12

APPENDIX

1. (Rejected) A system comprising:

a device comprising an interface, the interface comprising a plurality of operations to be selected by a user;

a monitoring unit configured to monitor data of selecting of the plurality of operations of the interface by the user, and to generate a log of the monitored data, the log of the monitored data being stored in the device, and to automatically start the monitoring without requiring a connection to a receiving device to which the log of monitored data is to be sent, the log of the monitored data being in a form of an abstract class;

a communicating unit configured to receive an object derived from the abstract class including the log of the monitored data, and to automatically communicate the log of the monitored data by a unidirectional communication without requiring input from the device to which the log of the monitored data is to be sent.

2. (Canceled).

3. (Rejected) A system according to Claim 1, wherein the device is an image forming device and the interface is an operation panel of the image forming device.

4. (Rejected) A system according to Claim 1, wherein the device is an appliance and the interface is an operation panel of the appliance.

5. (Rejected) A system according to Claim 1, wherein the communicating unit

sends the log of the monitored data when the user exits the device.

6. (Rejected) A system according to Claim 1, further comprising a setting unit

configured to set a number of sessions of the device to be executed by the user prior

to the communicating unit communicating the log of the monitored data.

7. (Rejected) A system according to Claim 6, wherein the abstract class

includes first and second derived classes, the first derived class storing data of one

session and the second derived class storing data of the set number of sessions.

8. (Rejected) A system according to any one of Claims 1 and 3-7, wherein the

communicating unit communicates the log of the monitored data by Internet mail.

9. (Rejected) A system comprising:

a device comprising interface means, the interface means for providing a

plurality of operations to be selected by a user;

monitoring means for monitoring data of selecting of the plurality of

operations of the interface means by the user, and for generating a log of the

monitored data, the log of the monitored data being stored in the device, and to

automatically start the monitoring without requiring a connection to a receiving

device to which the log of monitored data is to be sent, the log of the monitored data

being in a form of an abstract class;

communicating means for receiving an object derived from the abstract class

including the log of the monitored data, and for automatically communicating the log

of the monitored data by a unidirectional communication without requiring input from the device to which the log of the monitored data is to be sent.

10. (Canceled).

11. (Rejected) A system according to Claim 9, wherein the device is an image forming device and the interface means is an operation panel of the image forming device.

12. (Rejected) A system according to Claim 9, wherein the device is an appliance and the interface means is an operation panel of the appliance.

13. (Rejected) A system according to Claim 9, wherein the communicating means sends the log of the monitored data when the user exits the target device.

14. (Rejected) A system according to Claim 9, further comprising a setting means for setting a number of sessions of the device to be executed by the user prior to the communicating means communicating the log of the monitored data.

15. (Rejected) A system according to Claim 14, wherein the abstract class includes first and second derived classes, the first derived class storing data of one session and the second derived class storing data of the set number of sessions.

16. (Rejected) A system according to any one of Claims 9 and 11-15, wherein the communicating means communicates the log of the monitored data by Internet mail.

17. (Rejected) A method of monitoring usage of an interface of a device, the interface including a plurality of operations to be selected by a user, comprising the steps of:

monitoring data of selecting of the plurality of operations of the interface by the user;

generating a log of the monitored data, the log of the monitored data being stored in the device, and to automatically start the monitoring without requiring a connection to a receiving device to which the log of monitored data is to be sent, the log of the monitored data being in a form of an abstract class; and

receiving an object derived from the abstract class including the log of the monitored data, and automatically communicating the log of the monitored data by a unidirectional communication without requiring input from the device to which the log of the monitored data is to be sent.

18. (Canceled).

19. (Rejected) A method according to Claim 17, wherein the device is an image forming device and the interface is an operation panel of the image forming device.

20. (Rejected) A method according to Claim 17, wherein the device is an appliance and the interface is an operation panel of the appliance.

21. (Rejected) A method according to Claim 17, wherein the communicating step sends the log of the monitored data when the user exits the device.

22. (Rejected) A method according to Claim 17, further comprising a step of setting a number of sessions of the device to be executed by the user prior to the communicating device communicating the log of the monitored data.

23. (Rejected) A system according to Claim 22, wherein the abstract class includes first and second derived classes, the first derived class storing data of one session and the second derived class storing data of the set number of sessions.

24. (Rejected) A method according to any one of Claims 17 and 19-23, wherein the communicating step communicates the log of the monitored data by Internet mail.

25. (Rejected) A computer program product comprising:

a computer storage medium and a computer program code mechanism embedded in the computer storage medium for causing a computer to monitor a user's usage of an interface of a device, the interface comprising a plurality of operations to be selected by a user, comprising:

a first computer code device configured to monitor data of selecting of the plurality of operations of the interface by the user, and configured to generate a log of

the monitored data, the log of the monitored data being stored in the device, and to

automatically start the monitoring without requiring a connection to a receiving

device to which the log of monitored data is to be sent, the log of the monitored data

being in a form of an abstract class; and

a second computer code device configured to receive an object derived from

the abstract class including the log of the monitored data, and to automatically

communicate the log of the monitored data by a unidirectional communication

without requiring input from the device to which the log of the monitored data is to be

sent.

26. (Canceled).

27. (Rejected) A computer program product according to Claim 25, wherein

the device is an image forming device and the interface is an operation panel of the

image forming device.

28. (Rejected) A computer program product according to Claim 25, wherein

the device is an appliance and the interface is an operation panel of the appliance.

29. (Rejected) A computer program product according to Claim 25, wherein

the second computer code device is further configured to send the log of the

monitored data when the user exits the device.

30. (Rejected) A computer program product according to Claim 25, further

comprising a third computer code device configured to set a number of sessions of the

device to be executed by the user prior to the second computer code device

communicating the log of the monitored data.

31. (Rejected) A computer program product according to Claim 30, wherein

the abstract class includes first and second derived classes, the first derived class

storing data of one session and the second derived class storing data of the set number

of sessions.

32. (Rejected) A computer program product according to any one of Claims

25 and 27-31, wherein the second computer code device is further configured to

communicate the log of the monitored data by Internet mail.